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SOURCE GOST 2967-45,

USSR STANDARD FOR INSTRUMENT LUBRICANT AF-70 (GOST 2967-45)

(Petroleum Industry B 24)

1. This standard applies to consistent lubricant used for lubricating artillery and other instruments and mechanisms where high lubricant film strength is required.

2. Composition of the lubricant	Percent by Wt
a. Ceresin (GOST 2488-44, grades 75 and 80)	10±0.5
b. Lead stearate (molten)	10±0.5
c. Triethanolamine	0.1
d. "MVP" Vaseline oil (GOST 1805-42)	remainder

NOTE: 1. Lead stearate must be produced by a substitution reaction from sodium stearate. Sodium stearate must not contain any free organic acid or alkali.

ii. Before melting, lead stearate must be checked to be sure it is free from water-soluble salts (lead reaction).

3. Lubricant must meet the following physico-chemical requirements:

a. Appearance and properties: vaseline-like substance with color range from light yellow to brown.

b. Lubricant spread about 1 mm thick on a glass plate over light source must appear homogeneous and free from clots.

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<u>Physicochemical Properties</u>	<u>Values</u>	<u>Test Methods</u>
1. Penetration at low temperatures		GOST 2757-44
At -10°C not less than	100	
At -50°C not less than	50	
2. Drop point (Ubbelohde) not below	60°C	OST NKTP 7872/2292, M.I. 7zh-36
3. Syneresis at 50°C not over	6%	GOST 2633-44
4. Preservative test on steel and brass plates at 60°C for 48 hr	Passes	GOST 2712-44, with the amendments regarding temperature and thermostat test duration
5. Adherence to metallic surface in continuous layer at 60°C for 24 hr, not less than	2 mg/sq cm	OST NKTP 7872/2292, M.I. 8g-37
6. Mechanical impurities	None	OST NKTP 7872/2292, M.I. 191-37
7. Water	None	GOST 1044-41

NOTE: 1. For determination of syneresis, use of "red cover" filter is allowed.

11. Preservative test is carried out: (1) on steel plates, grade 40, 45, 50 and similar grades (GOST V-1080-41); and (2) on brass plates, grade LS59-1 and similar grades (GOST V-1019-41).

4. Packing, marking, storing, and handling and inspection of lubricant is carried out as prescribed by GOST 1510-45 with the following amendments.

Lubricant is packed in tin containers of maximum 20-liter capacity. On the side of each container is stenciled a label showing name and manufacturing date of the lubricant. The label must be made in black enamel indelible in water and mineral oil.

The whole external surface of filled containers is greased with a mixture of rifle and gun lubricants (1:1). For transportation, containers are packed in wooden crates as designed and specified by GAU KA.

5. Sampling of lubricant is performed as prescribed by GOST 2517-44. The test sample consists of 1 kg of lubricant.

Proposed by the People's Commissariat of Petroleum Industry USSR.

Approved by the All-Union Committee on Standards, 11 September 1945.

Effective 1 November 1945.

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